

## REMARKS

Applicant respectfully requests reconsideration of this application in view of the following remarks. For the Examiner's convenience and reference, Applicant's remarks are presented in substantially the same order in which the corresponding issues were raised in the Office Action.

### Status of the Claims

Claims 15-17 and 21 are pending. No claims are currently amended. No claims are canceled. No claims are added. No new matter has been added.

### Summary of the Office Action

Claims 15-17 and 21 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent No. 6,199,181 to Rechef et al. (hereinafter "Rechef") in view of Fosdick, "VM/CMS Handbook for Programmers, Users and Managers" (hereinafter "Fosdick"), and in view of Official Notice.

### Response to Rejections under 35 U.S.C. § 103(a)

Claims 15-17 and 21 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Rechef in view of Fosdick, and in view of Official Notice. Applicant respectfully submits that claim 15 is patentable over the combination of cited references because the combination does not disclose all of the features of the claim.

Claim 15 recites in part:

**disabling the secondary operating system in response to a breach of the insulated original operating system by an input/output signal being routed to the original operating system** while the original operating system is insulated.  
(Emphasis added).

Obviousness requires that all of the claim features are disclosed by the cited references. Applicant respectfully disagrees with the Office Action's characterization of the cited references because the combination of cited references fails to disclose all of the features of the claim. In particular, the combination of Rechef, Fosdick and Official

Notice does not disclose disabling the secondary operating system in response to a breach of the insulated original operating system by an input/output signal being routed to the original operating system.

Rechef is directed to protecting an operating environment on a processor from a rogue program operating on the processor. (Rechef, Abstract). Rechef discloses an operating system with multi-tasking capability to allow multiple programs to execute simultaneously. (Rechef, Col. 1 lines 25-35). The programs share system resources, thus necessitating only one operating system to run multiple programs. Some known programs make up a set of trusted programs, while other programs of unknown origin are untrusted. The untrusted programs may act maliciously to corrupt the behavior of the trusted programs. (Rechef, Col. 2 lines 5-23). Rechef discloses security features to prevent such a breach and to ensure isolation between the programs. The described security features include rings-of-protection, paging, different mappings for different tasks, and segmentation. (Rechef, Col 2 lines 24-43). Nevertheless, **none of the security features disclosed in Rechef include disabling a program in response to a breach of another program.** Furthermore, all of the security features disclosed in Rechef are directed towards application programs rather than an operating system, as claimed. One of skill in the art would recognize the distinction between a system level operating system and an individual program running within the operating system. Therefore, Applicant respectfully submits that Rechef does not disclose disabling a secondary operating system in response to a breach of an insulated original operating system by an input/output signal being routed to the original operating system, as claimed.

Fosdick describes an operating system called Virtual Machine/Conversational Monitor System (VM/CMS). (Fosdick, Page 4). CM/CMS includes a control program that virtualizes machine hardware. (Fosdick, Figure 2-2). Fosdick, however, does not disclose that the control program disables a secondary operating system in response to a breach of an insulated original operating system by an input/output signal being routed to the original operating system.

The current Office Action takes Official Notice of claim features stating that:

the limitation “of activating an environmental shutdown by disabling the emulated operating system in response to interactions

between the original operating system and the emulated operating system”, was well known at the time of invention was made in the analogous art of Rechef and Fosdick.  
(Office Action, August 25, 2010).

Applicant respectfully submits that the cited portion of the claim was previously amended and therefore the taking of Official Notice of this claim feature is moot. The Office Action does, however, state that the combination of Rechef and Fosdick fails to disclose shutting down or disabling the emulated operating system. Applicant respectfully submits that it would be improper to take Official Notice of this claim feature because it is not a fact capable of instant and unquestionable demonstration as being well-known in the art. Even U.S. Patent No. 5,564,011 to Yammine et al. (hereinafter “Yammine”), cited in the Advisory Action issued on February 18, 2010, fails to disclose this feature of the claims. Yammine discloses terminating a virtual machine when the application running on the machine is discontinued. That is, if a single application, such as a word processor, were running in the virtual machine, and the word processor were terminated, the virtual machine is terminated. Yammine also discloses terminating the virtual machine in response to a user order. That is, the user instructs the virtual machine, as an application, to terminate. The actual feature of the claims includes disabling the secondary operating system in response to a breach of the insulated original operating system **by an input/output signal being routed to the original operating system**. In the context of Yammine, this would mean terminating the virtual machine in response to a signal that should be routed to an application running in the **virtual machine** instead of being routed to the **operating system** in which the virtual machine is running. However, Yammine does not disclose terminating the virtual machine in this manner, and therefore, Applicant respectfully submits that the taking of Official Notice of this claim feature would be improper.

In contrast to Rechef, Fosdick and Official Notice, claim 15 includes the feature of “disabling the secondary operating system in response to a breach of the insulated original operating system by an input/output signal being routed to the original operating system.” For at least the reasons stated above, the combination of references fails to

disclose all of the features of the claim and Applicant respectfully submits that claim 15 is patentable over the cited references.

Given that claims 16, 17 and 21 directly or indirectly depend from the above independent claim, at least for reasons similar to those discussed above, it is respectfully submitted that these dependent claims are patentable over the cited references.

Accordingly, Applicant requests that the rejection of claims 15-17 and 21 under 35 U.S.C. § 103(a) be withdrawn.

### **RESERVATION OF RIGHTS**

Applicant believes every assertion by the Office Action has been addressed, however in the interest of clarity and brevity, Applicant may not have asserted every available argument for each assertion made in the Office Action. Applicant reserves all rights not exercised in connection with this response, such as the right to challenge or rebut any tacit or explicit characterization of any reference or of any of the present claims, the right to challenge or rebut any asserted factual or legal basis of any of the rejections, the right to swear behind any cited reference such as provided under 37 C.F.R. §1.131 or otherwise, or the right to assert co-ownership of any cited reference. Applicant does not admit that any of the cited references or any other references of record is relevant to the present claims, or that they constitute prior art. To the extent that any rejection or assertion is based upon the Examiner's personal knowledge, rather than any objective evidence of record as manifested by a cited prior art reference, Applicant timely objects to such reliance on Official Notice, and reserves all rights to request that the Examiner provide a reference or affidavit in support of such assertion, as required by MPEP §2144.03. Applicant reserves all rights to pursue any canceled claims in a subsequent patent application claiming the benefit of priority of the present patent application, and to request rejoinder of any withdrawn claim, as required by MPEP §821.04.

## CONCLUSION

It is respectfully submitted that in view of the amendments and remarks set forth herein, the rejections and objections have been overcome. The Examiner is invited to contact Applicant's representative Larry Johnson at (408) 545-7194 if the Examiner believes such action would expedite examination of the present application.

Please charge any additional fees under 37 C.F.R. §§ 1.16, 1.17, 1.18, 1.20 and 1.21 that may be required to maintain pendency of the present application, or apply any credits to PTO deposit account number: 02-2666.

Respectfully submitted,

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